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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/891,654	06/27/2001	Takashi Maruko	Q65201	5513

7590 07/13/2005

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Washington, DC 20037-3213

EXAMINER

DUONG, THANH P

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/891,654

Applicant(s)

MARUKO ET AL.

Examiner

Tom P. Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6,7,10 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,7,10 and 12-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicants' remarks and amendments filed on April 14, 2005 have been carefully considered. Claims 1 and 10 have been amended. Claims 5, 8-9, and 11 have been canceled. New claims 12-14 have been added. Claims 1-4, 6-7, 10, and 12-14 are pending in this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3, 6-7, 10, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Publication (2000-051397), herein referred as JP '397 in view of Shimosaka et al. (5,816,937). Regarding claims 1-3, 6-7, and 14, JP '397 discloses a multi-layer golf ball comprising of a solid core (1) with a deflection of 3.0-4.5 mm under an applied load of 100kg (Abstract), an intermediate layer (2) made of ionomer resins (Section 0023) with thickness G1 of 0.8-3.5 mm (Section 0033) and Shore D hardness of 45-57 (Section 0034), and a cover (3) with thickness G2 of 0.5-2.5 mm (Section 0041) and Shore D hardness of 45-70 (Section 0041) and is formed of an urethane resin (Section 0036). JP '397 does not disclose the optimized formula: $[67.9\% \geq G_1 / (G_1 + G_2)] \times 100 \Rightarrow 51.7\%$; however, selecting a given G1 value of 1.0 mm

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and G2 value of 0.5 mm from the above range and substituting these values into the above formula will yield 66.6%, which is greater than or equal to 51.7% and less than 67.9%, which satisfies the above optimized formula. Thus, it would have been obvious in view of JP '397 to one having ordinary skill in the art to select the appropriate G1 and G2 values in the above range to satisfy the optimized formula at most thru routine optimization since the above G1 and G2 values are recognized as result-effective variable, which can be optimized thru routine optimization. (See *In re Antoine*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977) and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). MPEP 2144.05. With respect to the hardness of the intermediate layer is higher than the hardness of cover, JP '397 discloses the intermediate cover hardness and cover hardness ranges of 45-57 and 45-70, respectfully and it would have been obvious in view of JP '397 to one having ordinary skill in the art to fabricate the golf ball with an intermediate layer having a higher hardness values than the cover layer being the fact that the ranges are overlapped. Alternatively, Shimosaka '937 teaches it is desirable to fabricate the golf with an intermediate layer having a higher Shore D hardness than the cover layer to provide a golf ball with improve flight distance and a softer feel upon ball impact (Col. 1, lines 55-64). Thus, it would have been obvious in view of Shimosaka '937 to one having ordinary skill in the art to optimize the golf ball of JP '397 with harder intermediate cover than it cover layer as taught by Shimosaka in order to provide a golf ball with improved flight distance and softer feel upon ball impact. Regarding claim 10, JP '397 does not disclose the optimized formula: $65\% \Rightarrow [G_1 / (G_1 + G_2)] \times 100 \Rightarrow 51.7\%$; however, selecting a given G1 value of 1.2 mm and G2 value of

1.0 mm from the above range and substituting these values into the above formula will yield 54%, which satisfies the above optimized formula. Thus, it would have been obvious in view of JP '397 to one having ordinary skill in the art to select the appropriate G1 and G2 values in the above range to satisfy the optimized formula thru routine optimization. (See *In re Antoine*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977) and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). MPEP 2144.05.

Regarding claims 12-14, the applied references disclose the claimed invention but do not expressly disclose the deflection values of the intermediate layer and cover layer. However, JP '397 discloses the intermediate and cover layers are made of the same material and same thickness as the claimed invention; therefore, one of ordinary skill in the art would have expected the golf ball of JP '397 have the deflection ranges of the claimed invention. Note, a prima facie case of either anticipation or obviousness has been established when the claimed and the prior art products are identical or substantially identical in structure or composition. See *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433, (CCPA 1977).

2. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the JP '397. JP '397 discloses a urethane cover (Section 0036) of the claimed invention but fails to disclose expressly the melt index of at least 3.0 dg/min at 190° C. Note, the melt index is a process parameter that used to control the viscosity of the polymer material during the molding process in order to provide proper molding of the ball cover. It is conventional to control a melt index of at least 3.0 dg/min at 190° C in order to provide

proper molding to the cover and it would obvious to do so here to gain the same benefit.

Note, Product-by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps (See MPEP 2113).

Response to Arguments

Applicant's arguments filed 4/14/05 have been fully considered but they are not persuasive. With respect to the Applicant's argument of JP '397 fail to disclose the amended claimed formula, Examiner respectfully disagrees. JP '397 discloses the G1 and G2 values of the claimed invention, and the G1 and G2 values of JP '397 satisfy the amended claimed formula as described in paragraph 1. With respect to the argument of the Examples of JP '397 does not satisfy the claimed formula, Examiner respectfully disagrees. The Examples illustrated by JP '397 are not limited to the scope of the invention. With respect to the argument that JP '397 does not provide any teaching or suggestion with respect to flight performance by selecting thicknesses for the intermediate layer and the cover layer within the claimed to satisfy the claimed formula, Examiner disagrees. JP '397 discloses the intermediate and cover layer thicknesses of the claimed invention and the G1 and G2 values are selected within the claimed range and these values satisfy the claimed formula as described in paragraph 1. Therefore, one of ordinary skill in the art would have expected the golf ball of JP '397 inherently has the flight performance characteristics of the claimed invention. Note, a prima facie case of either anticipation or obviousness has been established when the claimed and

the prior art products are identical or substantially identical in structure or composition. See *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433, (CCPA 1977).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

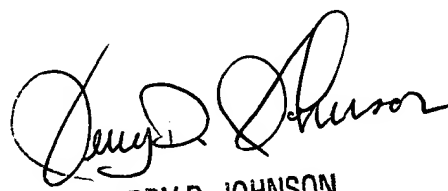
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom P. Duong whose telephone number is (571) 272-2794. The examiner can normally be reached on 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Duong
July 1, 2005
TD 


JERRY D. JOHNSON
PRIMARY EXAMINER
GROUP 1100